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Wise leaders fostering employees' speaking up behaviors: developing and validating a measure of leader-expressed practical wisdom

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Abstract
Practical wisdom, an essential component of leadership, has been approached mainly from a theoretical perspective. While there are barely any empirical studies on leaders' practical wisdom, quantitative ones are even rarer, and no *valid* measure of a leader's practical wisdom exists. Thus, our understanding of whether and how wise leaders influence their followers is limited. Inspired by Thomas Aquinas' ideas on practical wisdom, we operationalize it as a tridimensional capacity of *inquiring*, *judging*, and *acting* in an emotionally regulated way, and develop and validate a corresponding measure of leader-expressed practical wisdom. To support our operationalization, we test how leader-expressed practical wisdom predicts employees' speaking up behaviors via their psychological safety. Our rationale is that to make better decisions, wise leaders are receptive to employees' views that address matters of concern and challenge the status quo with the intention of improving the situation – such a receptiveness being enabled by fostering employees' psychological safety. Through a two-wave field study, a three-wave field study, and a vignette-based experiment carried out in three countries we obtain empirical support for that three-dimensional construct and show that leader-expressed practical wisdom predicts employees' speaking up behaviors via their psychological safety.

Keywords Leader-expressed practical wisdom · Psychological safety · Speaking up behaviors

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1 Introduction

> The practical wisdom of employees … will never reach the manager who is convinced that his position puts him above the need to listen to other's opinion and advice.
> Konosuke Matsushita (1978/1986, p. 64).

The pursuit of wisdom requires leaders to listen and learn from others (Chia and Holt 2007; Hühn and Meyer 2023; Ono and Ikegami 2020). Wise leaders make efforts to understand and be receptive to the true viewpoints of others, including (or even mainly) the employees' viewpoints that address matters of concern, that are perhaps at odds with the leader's opinion, and that challenge the *status quo* with the goal of improving the situation (LePine and Van Dyne 1998). Those employees' behaviors reduce the risks of normalized deviance and are crucial antidotes of organizational wrongdoing. They are essential for the "dialogical" encounters and practices that nourish the leader's practical wisdom (Cunliffe and Eriksen 2011; Steyn and Sewchurran 2021) and make them more effective. Wise leaders are thus more likely to make more effective and sustainable decisions (Chia and Holt 2007), and to pursue "performative excellence in the world of practical affairs" (Nonaka et al. 2014, p. 368).

For employees to adopt such speaking up behaviors, they must enjoy psychological safety, however, i.e., that they "have a sense of confidence" that the context, including the leader, "will not embarrass, reject, or punish [them] for speaking up" (Edmondson 1999 p. 354). If employees keep silent or refrain from expressing their true viewpoints fully, the leader's capacity to make better decisions and adopt actions that match the situational needs and the complexity at hand is weakened (Bachmann et al. 2018; Sasse-Werhahn et al. 2020). We thus advance that wise leaders are judicious enough to understand – and act accordingly – that they may encourage employees' speaking up behaviors by fostering employees' psychological safety.

A plethora of anecdotal evidence supports our argument. When Anne Mulcahy assumed the helm of Xerox in the early 2000s, she was advised to declare the company's bankruptcy (Mulcahy 2005). But she did not follow the "easy route" and was later credited with keeping the company afloat (Koehn 2013). In the face of complex challenges, she encouraged employees to express critical and dissonant points of view, was able to accommodate different perspectives, needs, and values, and then save the troubled company. She explained her approach as follows (Mulcahy 2010, p. 10):

> "You need internal critics (…). I learned how to groom those critics early on, and that was really, really useful. This requires a certain comfort with confrontation, though, so it's a skill that has to be developed. (…) The decisions that come out of allowing people to have different views – and treasuring the diversity of those views – are often harder to implement than what comes out of consensus decision making, but they're also better."

By contrast, consider the Volkswagen executives involved in the Dieselgate scandal. They "were smart managers who possessed excellent engineering and financial skills" (Bachman et al. 2018, p. 127). However, they failed to reflect on and judge seriously the possible consequences for the company and themselves of falsifying emission tests (Patsioti-Tsacpounidis 2023). People were afraid of conveying an inconvenient truth to those in power – that reaching the triple goal of manufacturing fast, cheap, and green vehicles was impossible (Gaim et al. 2021). Had those managers *deliberated* (i.e., explored and reflected on the information available), *judged* the perverse consequences of installing the deception-producing device on the company's reputation and performance if it were to be discovered, and *acted* accordingly, the scandal would have been avoided.

A close look at the root causes of many corporate disasters, such as Boeing's 737 MAX tragedy (Robison 2021), and the Theranos (Carreyrou 2018) and Wells Fargo scandals (Edmondson 2018) also reveals a consistent element: employees who fear to speak up in the face of domineering and unwise leaders who, as a consequence, do "foolish things" (Bachmann et al. 2018; Moberg 2007).

Cases like these have motivated the conceptual comeback of practical wisdom – the capacity to deliberate, judge, and execute actions in accordance with the individual's best decision-making ability to deal with the *particularities* of each situation (Bachmann et al. 2018; Sasse-Werhahn et al. 2020). The increasing complexity, uncertainty, unpredictability, and volatility of today's business world, as well as the multiple tensions and paradoxical interdependencies that pervade organizations, all make algorithm-based calculations, "formulaic answers" (Cunliffe and Eriksen 2011, p. 443), and technical and rules-based approaches unsuited to nurture effective and virtuous decision-making. In some complex, uncertain, ambiguous, and volatile situations, even a particular normative or moral framework that a leader espouses may be inadequate to make effective and virtuous decisions – a good reason for the leader to consider other frameworks and pay attention to views from others who espouse a different normative or moral framework, instead of applying his/her normative framework "mechanically" (Swartwood 2022, p. 25). For example, in a circumstance that requires a compassionate response to someone's suffering, a leader who is mostly deontology-oriented must listen, respect, and reflect upon views from others whose normative framework is care-based. In other circumstances, however, a compassionate response is unwise. As Swartwood (2020, p. 85) illustrated, a compassionate concern for the well-being of a person targeted by a sexual harassment complaint "may motivate an unwise excoriation of the accuser."

A truly wise leader is therefore aware that all moral frameworks have limitations, are not always mutually exclusive, are even connected by some form of unit (Casali 2011; Macdonald and Beck-Dudley 1994; Upton 1993; Schwartz 2005; Swartwood 2022), and may be considered according to the particularities of each situation. In short, in dealing with different contexts and challenges, the *situationally embedded* virtue of practical wisdom is necessary. Accordingly, practical wisdom has been described as "an essential component of outstanding leadership" (Yang 2011, p. 617), the "*sine qua non* virtue for the business leader" (Naughton 2017, p. 189), an enabler of responsible leadership (Steyn and Sewchurran 2021), the "peak of excellence in

leadership and decision making" (Sasse-Werhahn et al. 2020, p. 55), and an antidote to hubristic leadership (Sadler-Smith and Cojuharenco 2021).

The theme of practical wisdom in leaders has been approached mainly from a theoretical perspective. Empirical studies are rare. Even rarer are quantitative ones, and no *valid* measure of leaders' practical wisdom exists (Kristjánsson et al. 2021). With this in mind, and considering the rationale presented in the next section, we develop and validate a measure of leaders' practical wisdom that meets the first steps proposed by Hinkin (1998): (1) item generation, (2) questionnaire administration, (3) initial item reduction, (4) confirmatory factor analysis, and (5) convergent/discriminant, and predictive validity. At the same time, we test how a wise leader fosters employees' speaking up behaviors via their psychological safety. A two-wave field study, a three-wave field study, and a vignette-based experiment were carried out in three culturally different national contexts, which increases the cross-cultural validity of our research and supports the hypothesized causality.

2 Why a new measure?

Our rationale for developing a new measure of leaders' practical wisdom, instead of resorting to or adapting some of the existing ones, is manyfold. The "wisdom" component of the character-based measure of virtuous leadership suggested by Thun and Kelloway (2011) reflects a set of strengths (e.g., creativity) that, while belonging to the nomological network of practical wisdom, are not truly *constitutive* of practical wisdom. Also, the "wisdom" dimension of servant leadership (Barbuto and Wheeler 2006) reflects mainly "foresight". Envisioning the future and anticipating its consequences is, at best, a component of practical wisdom – but does not guarantee a wise decision, given that wisdom also requires deliberating and acting wisely. The 15-items adopted by Ding et al. (2019) to measure "wise (phronetic) leadership", based on Nonaka and Takeuchi's (2011, p. 61) "six abilities of the phronetic leaders", do not distinguish, conceptually, the "abilities" of wise leaders from the essence of practical wisdom. For example, two abilities (communicating in ways that everybody understands; exercising political power) may characterize a great variety of leaders, including unwise ones. Several items of the "Item-based guideline" suggested by Bachmann et al. (2018) to measure/conceptualize managers' practical wisdom contain multidimensional content. For example, item #2 is as follows: "Decision-makers are basing the decision-making process on universal rules, moral principles or spiritual values". While universal rules, moral principles, and spiritual values have some communalities, they represent different constructs. Another example is item #7 (our italics): "During the decision-making process, managers are aware of the unpredictable nature of the business environment *and* are employing out of the box thinking according to the stipulations of the situation at hand". One can be "aware of the unpredictable nature of the business environment" and simultaneously unable to "employ out of the box thinking". In short, when considered together, these measures are inconsistent regarding their dimensional contents, include items representing plural dimensions, and include dimensions that, although related with practical wisdom,

are not at the definitional core of practical wisdom. It is also difficult to find theoretical/conceptual consistency or unity among those multiple measures.

Resorting to and adapting models of *general* practical wisdom, or practical wisdom as conceptualized and measured in other domains and disciplines, to measure a *leader's* practical wisdom also is difficult because practical wisdom is domain-specific, depending to some extent on experience and domain knowledge (McKenna et al. 2009). Moreover, those "general" models, or models from other disciplines, are not parsimonious, and instead include dozens of items, tasks/dilemmas, and characteristics (e.g., Ardelt 2003; Darnell et al. 2022; Sternberg and Karami 2021) that would make data collection about leaders' practical wisdom impractical. For example, Bachmann et al.'s (2018) conceptualization and the corresponding "item-based guideline" include a *normative* dimension (comprising guidance and orientation on how to live a worthwhile life), an *integrative* dimension (which includes, e.g., deliberation, critical reflection balancing of tensions, and integration directed toward practice), and a *cultural heritage* dimension ("embracing established customs, beliefs, exemplary behavior, and concrete advice concerning all aspects of life, transmitted by secular and spiritual traditions"; p. 132). Several measures/scales are essentially "catch-all" instruments: they include a wide variety of virtues, character strengths, and interpersonal and intrapersonal skills and competencies (e.g., Webster 2003; Wink and Helson 1997), and it is difficult to understand how at least some of them represent the definitional essence of practical wisdom; these include being intelligent, realistic, tolerant, humorous, reminiscent, compassionate, having experienced many painful events in life, or many moral dilemmas (Webster 2003). Another problem with some of those models/measures is that the items are explicit about the construct being measured. For example, all items suggested by Krause (2016) include the word "wise" or "wisdom". All items are thus redundant with the construct name and may prompt individuals to give biased responses (affected by e.g., social desirability, self-presentation, and self-deception biases).

This dimensional and operationalization entanglement often results from a definitional plurality that pervades the literature on practical wisdom. Definitions are plural and inter-inconsistent (Darnell et al. 2022), thus making it unsurprising that different scholars identify different components of practical wisdom (for a review see Sternberg and Karami 2021). For example, Jeste et al. (2019, p. 216) defined practical wisdom "as a complex human characteristic or trait with specific components: social decision making, emotional regulation, prosocial behaviour (such as empathy and compassion), self-reflection, acceptance of uncertainty, decisiveness, and spirituality." Moberg (2007, p. 536), defined practical wisdom as "a disposition toward cleverness in crafting morally excellent responses to, or in anticipation of, challenging particularities." Sternberg (2007, p. 38) defined wisdom as "the use of successful intelligence, creativity, and knowledge as mediated by values to (a) seek to reach a common good (b) by balancing intrapersonal (one's own), interpersonal (others'), and extrapersonal (organizational, institutional, and/or spiritual) interests (c) over the short and long term to (d) adapt to, shape, and select environments". It is very difficult to identify any unity among these definitions, and the same can be said for many other definitions and conceptualizations. Grossmann et al. (2020b, p. 104) discussed such definitional plurality by noting that "authoritative anthologies [on wisdom] have

provided more construct definitions than chapters in each handbook". Sternberg and Karami (2021, p. 136) noted that the various models of wisdom "contain so many elements that it is not possible to incorporate each and every one in any single model without turning the model into a grab bag".

One possible explanation for this definitional and dimensional tangle, diversity, or inconsistency is rooted, paradoxically, in the essence of practical wisdom: "the keystone of all virtues" (MacIntyre 1966, p. 127) or the "mother" of all other virtues (Aristotle 1985, 1145a). However, such a root quality does not imply that a measure of practical wisdom must include all other virtues (which, by the way, would be unfeasible and unmanageable from an empirical research perspective). Being the *mother of all other virtues* is different from being a *combination of all virtues*. Being the *keystone of all virtues* differs from considering that all virtues *constitute* such a keystone. For these and other reasons, some scholars have considered practical wisdom as a "slippery concept" (Kinsella and Pitman 2012), a "fairly nebulous concept" (Kessler 2006), or a kind of "sixth sense" (Malan and Kriger 1998), something that is idiosyncratic to everyone under particular circumstances, and thus hard to measure (Meyer and Rego 2020).

Our research follows a pragmatic approach that may be further explored to test why, how, and when wise leadership, as operationalized here, produces the positive effects that scholars have indicated. We assume that one reason why several scholars and practitioners remain skeptical about the *practical value* of practical wisdom in leaders and organizations is the current lack of quantitative studies and of a valid measure of leaders' practical wisdom. Amidst a plethora of definitions, conceptualizations, and models of practical wisdom, what researchers must do is to clarify their own, clear, and rigorous definition, to operationalize a corresponding measure, and thereby contribute to the further theoretical and empirical *debate* upon the pros, cons, and limitations of such a measure. Such a path is more productive and from a research perspective is wiser (Frémeaux et al. 2021) than simply avoiding the attempt to study practical wisdom quantitatively. Meyer and Rego (2020) argued that refusing to measure practical wisdom in leaders would be, to a certain extent, an *unwise* way to handle the *virtuous* challenge of developing responsible leadership, improving workplaces, and addressing corporate sustainability challenges.

By drawing mainly on Aquinas (2005), but also on Aristotle (1985) and Naughton (2017), we adopt a specific conceptualization of practical wisdom (while acknowledging its limitations and that other conceptualizations are acceptable and may complement ours) and operationalize the construct as a tridimensional capacity of (1) *inquiring*, i.e., studying and reflecting on the complex reality involved in each particular decision-making process, (2) *judging*, i.e., developing a deep comprehension of that reality and deliberating how to handle it, and (3) *acting*, i.e., proceeding upon one's deliberate decision in an emotionally regulated way.

Differing from the most frequent approach of measuring practical wisdom through self-reports, which are affected by several biases (Darnell et al. 2022), we focus on leaders' behavioral manifestations of practical wisdom as perceived by employees (i.e., leader-expressed practical wisdom). Informant ratings are valid to measure leadership constructs (more about this in the subsection "Leader-expressed practical wisdom", below). Moreover, as leadership is a relational phenomenon (Cunliffe and Eriksen 2011; Uhl-Bien 2006), what matters most for how employees react to

the leader is what the leader expresses toward employees (Connelly and Hülsheger 2012) rather than the leader's inner experiences. This focus on the leader-expressed practical wisdom is consistent with the two serial outcomes studied here: employees' psychological safety (Edmondson 1999) and their speaking up behaviors, which are important foundations of competitive and sustainable organizations (Burris 2012; Edmondson 2018). Both are essential for the "dialogical" attitude that nourishes leaders' practical wisdom (Cunliffe and Eriksen 2011; Steyn and Sewchurran 2021) and make wise leaders more likely to make effective sustainable decisions.

3 Practical wisdom as a three-dimensional construct

3.1 Situationally sensitive rationality and action

Schwartz (2011, p. 10) pointed out that "wisdom rides herd on other virtues, enabling people to resolve conflicts among virtues, to find the 'mean', and to tailor behavior to the demands of the specific situations they face". This reasoning is consistent with Thomas Aquinas' *Summa Theologiae* (Aquinas 2005), in which practical wisdom is presented as the virtue that perfects decision-making. The real worth of practical wisdom comes to the fore when one faces a *particular* or *singular* complex situation in which there are no rules that apply at all; when there is a need of "inventing (…) behavior suited to the singular nature" of the situation (Ricoeur 1992, p. 269) after having inquired and deliberated about that situation. Practical wisdom represents the "ability to discern the significant aspects of a particular situation and to apply one's knowledge, experience, and values to decide, based on experience and learning, the right thing to do" (Meyer and Rego 2020).

Instead of simply following guidelines, instructions, or even deontological norms, practical wisdom is rather similar to a reflection-action process, a reflected deliberation, which entails three interrelated stages (Naughton 2017): to "inquire", to "judge," and to "act" (i.e., to proceed upon one's decision). Therefore, practical wisdom is situationally embedded: one decision or action that is wise in one situation may be foolish in another.

Practical wisdom differs from instrumental and cautionary self-interest (Smith 2002). Moreover, while intelligence enables practical wisdom (Steyn and Sewchurran 2021), a high IQ is not enough to be wise (Grossmann, Weststrate, et al. 2020b), which explains why "otherwise clever businesspeople do foolish (i.e., unwise) things" (Moberg 2007, p. 535). Practical wisdom also shares commonalities with rationality, but "whereas rationality is rule-based and abstract, wisdom requires operations that flexibly balance rule-based and pragmatic concerns at hand", and "in contrast to rationality, wisdom is commonly invoked for working through ill- (rather than well-) defined problems" (Grossman, Weststrate, et al. 2020, p. 111). In summary, practical wisdom is *situationally sensitive* rationality and action (Steyn and Sewchurran 2021).

3.2 Practical wisdom and leadership

Practical wisdom is particularly suitable to advise organizational leaders who operate in complex, uncertain, and ambiguous contexts (Bachman et al. 2018; Cunliffe and

Eriksen 2011). In such a complex and interdependent context, rules, principles, and cleverness are not enough to shape decisions; practical wisdom is necessary. Leaders must be able (a) to observe and assess in an ongoing way the complex features of the particular situation at hand in that particular time, (b) to consider a problem from all angles, and (c) to use discernment to make decisions in each circumstance and time over concrete, contingent issues (Bachman et al. 2018; Schwartz 2011; Shotter and Tsoukas 2014; Sternberg and Karami 2021). Practical wisdom thus includes activities such as (1) searching for the necessary knowledge and information to judge correctly, (2) considering and respecting various perspectives from all parties, (3) reflecting, and discerning the best action or decision to adopt in particular circumstances, as the case of Anne Mulcahy mentioned above suggests (see also how James Burke, CEO of Johnson and Johnson, led the company during the Tylenol crisis; Hamilton 2006).

As we discuss below, a reflected deliberation encourages wise leaders to make employees feel psychologically safe to voice their true opinions and express problems, obstacles, and opportunities. When leaders fail to create dialogical encounters and practices (Cunliffe and Eriksen 2011; Steyn and Sewchurran 2021) that support those employees' speaking up behaviors, the consequences may be highly perverse for both the organizations and the leaders themselves. Consider the scandals and organizational wrongdoings mentioned earlier, or the fall of Carlos Ghosn, once idolized as Nissan's "savior", who did not allow others to contradict him. Meetings of the Board lasted less than 20 min on average – Ghosn considered some statutory auditors as being "fastidious" (Nissan Motor Co. Ltd. 2019 p. 11). In contrast, a wise leader is willing to explore others' perspectives and appreciates the utility of incorporating different values, perspectives, and interests in decision-making (Cunliffe and Eriksen 2011; Steyn and Sewchurran 2021). He/she is aware that such perspectives help to prevent problems, deal with crises, and make better decisions to tackle *particular* circumstances. When enabled by psychological safety, employees' speaking up behaviors are therefore pertinent outcomes to be included in research aimed at developing, operationalizing, and validating a measure of leaders' practical wisdom, as we do herein.

3.3 Inquiring, judging, and acting

We develop and operationalize our measure over three meta-components adapted mainly from the three "acts" of reason involved in practical wisdom as set out by Aquinas (2005, p. 5): "The first of these [acts] is to deliberate, which belongs to discovery, since to deliberate is to inquire. The second act is to judge about the things discovered, and this consists of theoretical reason. But practical reason, which is ordered to action, goes further; and the third act of practical wisdom is to command, which consists of applying the objects of our deliberation and judgement to our actions." A leader who makes efforts (a) to study, reflect, and be aware of the complexities of the *particular* context (s)he deals with in a particular time and situation (i.e., *inquiring*), and (b) to obtain a deep comprehension of that reality and how to handle it considering all parties (i.e., *judging)*, (c) is more able to proceed rightly upon her/his deliberate decision, thereby making wiser *decisions* and expressing wiser *actions*. This account of practical wisdom frames this virtue as a reflection-action process,

an embodied practice that transcends purely cognitive or intellectual properties and integrates knowledge with social practices (Sasse-Werhahn et al. 2020; Steyn and Sewchurran 2021).

This framework embraces, directly or indirectly, the features of wise reasoning as suggested by Grossmann and Dorfman (2019; see also Grossmann 2017) but it goes further as it also activates emotionally regulated action, which represents the "volition" phase of the well-established *Rubicon* model (Gollwitzer 2012; see Bachmann et al. 2018). This model suggests that decision-making is a two-stage, intentional act that demarcates a transition (metaphorically, *crossing the Rubicon*) from the pre-decisional phase ("motivation") to the post-decisional one ("volition"). While wise reasoning represents the motivational phase of a wise decision, practical wisdom requires *transitioning* to the volitional phase. Practical wisdom is "an action competence", and "no understanding of the concept can be complete unless it manifests in practice" (Steyn and Sewchurran 2021 p. 681; p. 689).

3.4 Leader-expressed practical wisdom

Considering the relational nature of leadership (Cunliffe and Eriksen 2011; Uhl-Bien 2006), and that practical wisdom includes a component of "relationality" (Cantrell and Sharpe 2015, p. 333) that "is inherently observable" (Darnell et al. 2022, p. 4), we treat practical wisdom as a component of the leader's outer personality. Outer personality represents personality from the observers' perspective, describing the practical wisdom the leader expresses in social interactions with others (Connelly and Hülsheger 2012). Studying leader-expressed practical wisdom, instead of *self-reported* practical wisdom, makes sense for several other reasons. First, self-reported practical wisdom measures the leader's self-conception, his/her internal motives and identity (involving both conscious and unconscious processes), which may be inconsistent with the leader's behavioral expressions as perceived by employees (Connelly and Hülsheger 2012; Petriglieri and Stein 2012). Second, self-reports are contaminated by social desirability, self-presentation, and self-deception biases (Grossmann, Dorfman, et al. 2020a; Sternberg and Karami 2021), leading to a measurement "trap": "less wise individuals are less likely to recognize their lack of wisdom, whereas wiser individuals may be more likely to recognize the limits of their wisdom", which can result in "systematic overestimations among the unwise and systematic underestimations among the wise" (Darnell et al. 2022, p. 3). Third, practical wisdom has a socio-relational dimension that no self-report is able to capture in full.

Our decision to measure a leader's characteristic based on informant ratings is also consistent with research showing that those ratings are valid to measure leadership constructs, including leader's beliefs and dispositions. For example, research of Murphy and Reeves (2019, p. 12) has suggested that people's perceptions of the mindset beliefs of leaders "can be more predictive of people's psychological experiences, motivation, and performance" than are the self-reported beliefs or behaviors of those leaders. Other researchers have suggested that informant ratings are valid to measure leadership constructs because those ratings reduce the risk that social desirability bias and response distortion will affect results (e.g., Mutschmann et al. 2022; Muris et al. 2017). In short, more and more researchers are relying on infor-

mant ratings, as opposed to self-ratings, to measure psychological constructs (Connelly and Ones 2010; Oh et al. 2011; Smith et al. 2018). Therefore, we conceptualize leader-expressed practical wisdom (see Owens et al. 2013) as *a leader's interpersonal characteristic that emerges in social contexts, connoting a displayed willingness and capacity (a) to explore, study, and reflect upon the particular circumstances and realities that are at stake in decision-making, (b) to understand and judge the complexity of those circumstances and realities, and (c) to make wary, emotionally regulated, and sound decisions.*

3.5 Moral aspirations and empathy

Before proceeding, we clarify why our three-dimensional model excludes the affective empathy component included in other models. We frame affective empathy as more of an antecedent (or a facilitator) than as a component of practical wisdom. An *empathetic* leader may be *unwise* because empathy can erode ethics and hinder effective moral responses (Waytz 2016). König et al. (2020, p. 130) observed that an empathetic CEO "may be more predisposed to false alarms, more biased in processing crisis-related information, overinclined toward apologetic sensegiving, and less committed to repairing the organization's operational system". It is thus possible to be both empathetic and unwise. Even Darnell et al. (2022), who considered empathy as constitutive of practical wisdom, acknowledged that empathy may lead to a deficient and biased appraisal of situations. However, the action component of our model contains an emotionally regulative orientation (Aristotle 1985; Darnell et al. 2022; Kristjánsson et al. 2021) that prevents the leader from acting tempestuously. Such an overall emotionally regulated capacity to act makes more sense than including several discrete emotions (which could lead to an "uncontrolled proliferation" of emotions; see Kristjánsson et al. 2021) or favoring a specific emotion such as compassion (Ardelt 2003).

Next, we clarify why our framework does not *directly* and *explicitly* include the moral dimension. Though moral virtues and practical wisdom are intertwined, practical wisdom remains an intellectual virtue (Kristjánsson et al. 2021; Steyn and Sewchurran 2021) that *steers* the other virtues to find the (golden) mean (Aristotle 1985; Schwartz 2011). Besides, including moral aspirations in operationalizing practical wisdom will lead to significant operative and even conceptual obstacles. First, there is a wide range of moral virtues, several of which are multidimensional. Including them all would make the measure of practical wisdom unmanageable (Kristjánsson et al. 2021). An alternative would be to present strong conceptual and philosophical arguments in favor of selecting a limited set of moral virtues. However, such a selection would be problematic, and even impracticable, because all moral virtues are conceptually and philosophically intertwined with practical wisdom (see, e.g., Crossan et al. 2017), and specific moral virtues may be called upon to operate wisely in *particular* situations. For example, while some situations may require impartiality and justice, others recommend compassion (Marshall and Thorburn 2014). Wise leaders must know when to apply the rules, but also when to make exceptions (Bohlin 2022; Schwartz 2011). Second, practical wisdom really matters for dealing with complex, ambiguous, and often paradoxical situations (see, e.g., Sasse-Werhahn et al. 2020).

Ethical and social dilemmas often overlap in those situations (Grossmann and Dorfman 2019), and two wise decision-makers may reach different *wise* decisions because they consider different moral purposes and assess differently the consequences of different paths. Here is the paradox: if, in theory, it would be possible that a single right, wise decision could be reached when tensions between different interests, values, principles, and moral purposes emerge, the paradox would be solved (meaning that there had been no true paradox, given that paradoxes are by definition persistently unsolvable; Schad et al. 2016), and practical wisdom would be unnecessary.

Rooting practical wisdom in a broad moral framework (e.g., deontology, utilitarianism, care-based ethics, virtue ethics, rights-based ethics; see, e.g., Upton 1993; Schwartz 2005) also has limitations. The complex and situationally sensitive nature of practical wisdom would require *different* frameworks to deal wisely/morally with *different* situations. In some situations, a wise person has to resort to various frameworks – and one could even argue that being able to adopt such a multi–approach is what characterizes a wise person. A leader who always roots his/her practical wisdom in, for example, a deontology framework may make very problematic and even dangerous ethical decisions. As Swartwood (2022, p. 25) noted in a chapter about the philosophical foundations for the study of wisdom, "moral philosophers have developed a variety of competing moral theories" that help decision makers to "capture what's right and virtuous", but "the most plausible theories could not be applied mechanically" – practical wisdom is necessary "to determine what they say we ought to do".

Third, often, a wise individual has to choose the lesser evil. Observers may be unaware of such a complexity, thereby ascribing a negative moral aspiration to that individual. Fourth, practical wisdom is affected by the values system of the individual and the particular values that each individual instils in dealing with a particular situation. As Aristotle (1985) suggested, practical wisdom is "the virtue that coordinates the mediation process between the absolute principles and moral requirements of a concrete situation" (Bachman et al. 2018, p. 137). Seeking to measure the virtuous nature of such a complex and situationally sensitive mediation is probably unwise. As Sternberg and Karami (2021, p. 142) noted, "if everyone had the exact same value system, wisdom likely would not be recognized as relevant to solving a problem", and differing values lead to potentially different (while wise) solutions. What is more, "wisdom-based problems have long-term consequences that may differ from short-term consequences" and solutions that seem wise in the short run may turn out to be harmful in the long run (Sternberg and Karami 2021, p. 143).

While being a responsible organizational leader requires being wise, different wise leaders make different *wise* decisions. A leader may downsize the company to save it from bankruptcy while another leader may decide to keep the jobs to affect the employees' engagement and protect both the company and the community in which it operates. A leader may shut down a profitable although polluting factory to protect the collective interest, but another leader may be aware that the first to suffer from the shutdown would be the lower-earning factory workers and their dependents, anticipating that the factory will be relocated to a poorer country, where regulation will likely be lower, and the danger of pollution will be even greater (Grossmann and Dorfman 2019). As Bachman et al. (2018, p. 134) acknowledged, wise decision-making

"shifts from schematic third-person universalism to specific first-person personalism, tracking the very characteristics, desires, and values, which one ascribes to oneself." These authors also noted that "who never fails cannot be practically wise" (p. 139). In short, there is no such thing as *perfect* practical wisdom (Kristjánsson et al. 2021).

The complex intricacies of human life are what make practical wisdom so relevant and consequential. Paradoxically, it is also the impracticability of identifying the specific moral values and purposes that are at play in each particular decision that explains why scholars have been reluctant to even attempt to measure practical wisdom. We acknowledge that measuring practical wisdom without *directly* and *explicitly* including moral aspirations has limitations: practical wisdom could *in theory* be invoked to facilitate disparate aims and purposes, including praiseworthy ends, blameworthy ends, and trivial ends (Darnell et al. 2022). However, we consider that *in practice* such an invocation is very unlikely if not impossible. In fact, we consider that wise *inquiry* (e.g., "seeking out information from a variety of sources so the best decision can be made"; see online Appendix A) and wise *judgment* (e.g., "conscientiously considering a problem from *all angles* to reach the best decision for *all parties*" and "grasping the complexity of most situations when making judgments") as measured in our study all make wise, emotionally regulated *action* and pursuing the common good more likely. As Sternberg and Karami (2021, p. 139) argued, "the common good always requires taking into account a diversity of interests" and balancing them.

We therefore advance that when considered in an *integrative* and *holistic* way, the content in our measure represents a focus on pursuing the common good – the moral value of which is uncontestable. As Roos (2017, p. 117, our italics) noted, practical wisdom "is the habit of acting in ways that are both ethically and economically effective, but *above all that support the common good*" (see also Aristotle 1985). Obviously it is difficult or even impossible in almost all cases to reach a single or universal understanding of what the common good is (Roos 2017). But it is precisely because of those intricacies that practical wisdom is necessary – and our measure, we consider, reflects a habit of acting that makes understanding and pursuing the common good more likely. If that understanding and pursuit were objective and clearly reachable via applying a rule or a clear set of principles, practical wisdom would be unnecessary.

Before proceeding it is worth mentioning our reason for excluding *directly* and *explicitly* the moral dimension in our measure. For operationalizing and validating our measure, we include two leadership behavioral patterns with substantial moral content as controls: leader-expressed integrity and leader-expressed humility. If our measure of leader-expressed practical wisdom were morally neutral or empty, it would be unrelated, or weakly related, to those two leadership behavioral patterns. Findings indicate otherwise: the correlations are strong or very strong, and wise leaders are perceived as being more honest and more humble (see Tables 1 and 3, below).

4 Leader-expressed practical wisdom and employees' speaking up behavior

4.1 Hypothesized model

One of the most important modes of leaders' practical wisdom is the mode of engaging in a dialogical, participative, and contextually sensitive way (Cunliffe and Eriksen 2011; Steyn and Sewchurran 2021) with their community of stakeholders (including employees) in each situation. Engagement is critically and communicationally interpersonal (Bachman et al. 2018; Shotter and Tsoukas 2014). Practical wisdom is dialogical in that it aims at testing and extending knowledge and transforming the understanding of each circumstance. It is also participative, aiming to critically examine different worldviews and make sense of different interests and values at hand. A wise leader therefore develops dialogical encounters (Steyn and Sewchurran 2021) and practices (Cunliffe and Eriksen 2011) with employees to test and extend knowledge about the situation, to transform the understanding of each circumstance, to obtain and critically examine different perspectives and interests, and to decide and act accordingly. In short, those dialogues help (wise) leaders to learn from other people, gather their wisdom, and create something like a "collective wisdom" (Ono and Ikegami 2020). Developing this dialogism, i.e., talking *with* people, not *to* them (Cunliffe and Eriksen 2011) requires psychological safety so that people may voice their true opinions about the situation and the ways to handle it, to share their ideas, suggestions and (dis)agreements frankly, and to point out problems, obstacles, and opportunities. Thus, to validate our new measure, we hypothesize that leader-expressed practical wisdom predicts employees' speaking up behavior via their psychological safety.

Employees feel psychologically safe when they believe that it is appropriate to take interpersonal risks – feeling comfortable being themselves, expressing their true opinions, engaging in constructive conflict or confrontation, and not fearing to be embarrassed, threatened, rejected, or punished for speaking up (Edmondson 1999; Edmondson and Lei 2014). Speaking up behaviors represent constructive upward-directed verbal communication aimed at challenging "the status quo with the intent of improving the situation" (LePine and Van Dyne 1998, p. 853; see also Liu et al. 2020). Those behaviors are important foundations of organizational competitiveness, health, and sustainability (Burris 2012; Edmondson 2018); they address attention to matters of concern, reduce risks of normalized deviance, and are crucial antidotes of organizational wrongdoing. If, as scholars have time and again defended, practical wisdom enables more responsible and effective leadership, then a wise leader might create a safe environment in which employees are willing to speak up and then nurture their wise inquiring, judgment, and emotionally-regulated actions.

While psychological safety is affected by several factors including individuals' characteristics, the relationship with the leader is crucial because that relationship conveys key information to employees regarding support, trust, respect, and competence (Cunha et al. 2019; Edmondson and Lei 2014; Edmondson and Mogelof 2006; Eibl et al. 2020; Frazier et al. 2017; Newman et al. 2017). Considering that leaders who express practical wisdom show that they (a) wish to be aware of the complexi-

ties of situations, (b) are open to information that contradicts their views, (c) are willing to face the specific circumstances when making a decision, (d) consider different alternatives and the information available before making important decisions, (e) make decisions based on careful reasoning, and (f) understand that dissonant views are crucial to nourish their thirst for information and knowledge, it is likely that they encourage the employees' psychological safety.

Truly wise leaders differ from those who, while being frank and transparent toward subordinates and asking subordinates to reciprocate by also being frank and transparent, behave in such an arrogant way that subordinates fear being frank and transparent toward the leader (Rego et al. 2022). Having a leader who is frank with employees and asks them to also be frank with the leader does not necessarily mean that they consider their leader to be genuinely receptive to their frankness and transparency in return. If subordinates believe that the frank and transparent leader is arrogant and does not respect them, they do not feel psychologically safe to express their true opinions and ideas toward the leader. In those cases, the leader-subordinate encounters are not dialogical (Sidani and Rowe 2018), but are instead imposing and domineering. Consider the case of Carlos Ghosn, former CEO of Nissan Motor Company. He was "renowned for his transparency (…) frankness and openness" (Kets de Vries and Florent-Treacy 2012, p. 190, 207) but his arrogance and hubris made him unwilling to listen to others and respect their views. He behaved as if he "was above the clouds", thereby creating a corporate culture in which no one "dared to say anything that would confront his opinions" (Chozick and Rich 2018, p. A1; see also Nissan Motor Co. Ltd. 2019). Although he was frank and transparent toward others, he was unwise – which contributed to his fall and the perverse consequences for the company. As noted in *The Financial Times* (2018 p. 10): "In the end, though, Icarus-like, [Ghosn] may have flown his corporate jet too close to the sun. For chief executives who move in the same circles and who seem never to touch down, Mr. Ghosn's fate sends an important warning that they had better come down to earth." Coming down to earth requires making employees feel psychologically safe to speak up and convey "truth to power". This is what wise leaders do – by listening and respecting information that contradicts their views, conscientiously considering a problem or challenge from diverse angles to reach the best decision for all parties, making decisions based on careful reasoning, and showing that employees' speaking up behaviors are crucial to nourish their thirst for information and knowledge. Hence:

Hypothesis 1 Leader-expressed practical wisdom predicts employees' psychological safety.

The relationship between psychological safety and speaking up is well established (Edmondson and Lei 2014; Newman et al. 2017). Because psychological safety, as promoted by dialogical encounters, creates the sense that taking interpersonal risks is encouraged, employees are more likely to feel safe to speak up and to challenge the current way of doing things. Thus:

Hypothesis 2 Employees' psychological safety predicts their speaking up behaviors.

Hypothesis 3 Leader-expressed practical wisdom predicts employees' speaking up behaviors indirectly through psychological safety.

4.2 Controls and the nomological network

The higher-order nature of practical wisdom and its intertwinement with a plurality of virtues makes the investigation of its nomological work an impracticable task for a single paper. As a meta (or root) construct, practical wisdom underlies other virtues and character strengths (Crossan et al. 2017). As Aristotle observed, it is the judgement arising from practical wisdom shaped by reflection and practice that enables individuals to apply other virtues in context. Leader-expressed practical wisdom is also related to a wide range of personal characteristics, e.g., openness to experience, humility, prosocial tendency (Brunzel and Ebsen 2023; Darnell et al. 2022; Grossmann, Dorfman, et al. 2020a), and leadership behaviors, e.g., *authentic* leadership (Gardner et al. 2021), *servant* leadership (Barbuto and Wheeler 2006), *ethical* leadership (Crossan et al. 2017; Gomezel and Stritar 2023), and *responsible leadership* (Steyn and Sewchurran 2021). Moreover, the range of leadership characteristics and behaviors that predict employees' psychological safety and speaking up behaviors is so vast that it would not be feasible to include all of them in this study. In addition, while the purification principle suggests that including controls "yields more accurate estimates of predictor-criterion relationships and/or purifies results of alternative explanations" (Bernerth et al. 2018, p. 133), the use of control variables can raise several issues (e.g., biased parameter estimates and inferential errors, reducing degrees of freedom, and lowering statistical power) and those problems are exacerbated as the number of controls increases.

Considering these and other conceptual and methodological challenges, as well as the "efficiency principle", which suggests identifying "a reasonably broad set of theoretically related constructs for inclusion in the discriminant validity" (Shaffer et al. 2016, p. 84), we adopt a parsimonious approach by including a limited set of variables (i.e., leader-expressed integrity, leader-expressed humility, and leader-expressed balanced processing). According to the literature these variables are related to practical wisdom and may affect the employees' speaking up behaviors via psychological safety. Even so, we acknowledge that including these variables may partially or entirely eliminate the very effects we aim to study (Spector and Brannick 2011).

5 Our empirical approach

5.1 Overview of studies

After having generated a pool of items to measure leader-expressed practical wisdom, three studies were carried out to validate the new measure. In the first two studies we collected data about leaders' practical wisdom and its outcomes at different times in order to reduce the risks of common method variance (Podsakoff et al. 2012).

Study 1 is a two-wave field study (in Portugal). One hundred and forty-eight individuals reported their perceptions of their leader's practical wisdom through our 16 items, and two to three weeks later they reported their sense of psychological safety and their speaking up behaviors. Confirmatory factor analysis (CFA) tested leader-expressed practical wisdom as a core construct built from three factors that correspond to the three-dimensional framework discussed above. Bias-corrected bootstrap analyses tested if leader-expressed practical wisdom predicts employees' speaking up behaviors via their psychological safety. Study 2 is a three-wave field study (in the US) that included 164 individuals. Leader-expressed practical wisdom was measured at T1, psychological safety two weeks later (T2), and speaking up behaviors two weeks after T2 (T3). The same statistical procedures used in Study 1 (CFA and bias-corrected bootstrap analyses) were used in Study 2.

Studies 1 and 2 included several controls that boost the robustness of our findings. Nevertheless, considering the correlational nature of the two studies, a third vignette-based experimental study (in the US and Brazil) was designed to establish causal inferences (Aguinis and Bradley 2014). While researchers often resort to student samples because access to a workers' sample tends to be difficult (Aguinis and Bradley 2014), we collected a sample of individuals with work experience. By increasing the similarity between the experimental and natural settings and presenting the participants with a situation that is familiar to them, our procedure improves realism, tends to increase the observed effects, and makes these effects more generalizable (Aguinis and Bradley 2014; Podsakoff and Podsakoff 2019). Three vignettes were created to represent three conditions (low practical wisdom, control, and high practical wisdom), and 233 participants from the US ($n=150$) and Brazil ($n=83$) were randomly allocated to one of the scenarios. Following the manipulations, individuals were asked to report how they would feel (i.e., psychological safety) and behave (i.e., speaking up behaviors) if they were to work in the team led by the leader described in the scenario. Because the findings are consistent across the two subsamples, the two were merged. Variance analysis and a bias-corrected bootstrap analysis tested if leader-expressed practical wisdom predicts employees' speaking up behaviors through their psychological safety. Unless indicated otherwise, all variables were measured through six-point scales. Collecting data in three different cultures (Hofstede 2001) and adopting both correlational and experimental designs increases the cross-cultural validity of our research and makes the hypothesized causality plausible.

5.2 Items generation

Twenty-three items for measuring the three components of leader-expressed practical wisdom, as discussed above, were first generated. Twelve items were collected/adapted from the literature: (1) three items measuring prudence as included in the HEXACO-60 inventory (Ashton and Lee 2009); (2) five items measuring prudence as included in the Leadership Virtues Questionnaire (Riggio et al. 2010); and (3) four items measuring prudence as included in the Virtuous Leadership Questionnaire (Wang and Hackett 2016). We considered items representing the three components of leader-expressed practical wisdom even if the label adopted by the respective authors was "prudence". The remaining items were developed by the authors through a dis-

cussion aimed at identifying behavioral expressions of practical wisdom covered insufficiently by the items collected from literature. After several iterations between the authors and three scholars with expertise in the field of virtues, evaluating the item-construct correspondence, seven items were removed because of redundancies, and adjustments were made in the 16 that remained. Next, eight scholars with expertise in the fields of virtues and organizational behavior were invited to independently assess the correspondence between the 16 items and the three components of leader-expressed practical wisdom. Kappa's coefficient, an indicator of interrater reliability, is 0.51 ($z=14.99$, $p<.001$; 95% CI: 0.44, 0.58), which represents moderate agreement. We kept the 16 items for further analysis to empirically assess the equivalence between the original 16 items and the final set of items emerging from factor analysis.

5.3 Study 1

5.3.1 Sample and procedures

We invited 1,200 individuals (from 134 organizations operating in Portugal) to report their perceptions of leader practical wisdom through the 16 items mentioned above (297 individuals participated). Two to three weeks later the same individuals reported their actual sense of psychological safety (seven items from Edmondson 1999; $\alpha=0.78$; sample item: "It is safe to take a risk on this team"), and their own actual speaking up behaviors (six items adapted from Premeaux and Bedeian 2003; $\alpha=0.83$; e.g., "I speak up when workplace happenings conflict with my sense of what is appropriate"). Several controls were included. Employee education was included because more highly educated employees may have more confidence, knowledge, and ability to recognize problems and opportunities, thereby having more ideas to voice (LePine and van Dyne 1998). They also are probably more employable and therefore experience lower risks when speaking up. Employee gender was included because this variable may be related to psychological safety and speaking up behaviors (Detert and Burris 2007; Nembhard and Edmondson 2006). Occupying a supervisory role (vs. not) was included because supervisors feel psychologically safer and may feel more obliged to engage in voice behaviors (LePine and van Dyne 1998). Leader-expressed integrity was included (five items adapted from Mayer and Davis 1999; $\alpha=0.94$; e.g., "Sound principles seem to guide the behavior of my leader") because leader integrity predicts employees' psychological safety and speaking up (Edmondson and Lei 2014).

One hundred and forty-eight individuals (47.3% female; 49.3% supervisors; M_{age}: 42.26 years, $SD=9.97$; working relationship with the leader ≥ three months) participated at both T1 and T2. They performed a wide range of jobs (e.g., administrative clerk, data analyst, commercial technician, HR technician, and financial auditor). No significant difference was found between those who participated at both T1 and T2 vs. those who participated only at T1 regarding leader-expressed practical wisdom ($M=4.03$ vs. 3.99, $p=.85$) and leader-expressed integrity ($M=3.96$ vs. 3.98, $p=.85$).

5.3.2 Factor analysis and discriminant validity

Following Lambert and Newman (2022) we performed confirmatory factor analysis (CFA; LISREL; maximum likelihood estimation) upon data from individuals who participated at both T1 and T2 (n=148). The three-factor model fits the data well ($\chi^2_{(101)}$=179.74; RMSEA: 0.08; GFI: 0.86; CFI and IFI: 0.95). Considering modification indices, loadings, and several comments from the eight independent raters mentioned above about the items' content[1], six items were removed. The final 10-items model fits the data well ($\Delta\chi^2_{(32)}$=57.31; p<.001; RMSEA: 0.07; GFI: 0.93; CFI and IFI: 0.98) and better than (a) a two-factor model in which inquiry and judgment are merged ($\Delta\chi^2_{(2)}$=27.47; p<.001; RMSEA: 0.10; GFI: 0.90; CFI and IFI: 0.96), (b) a two-factor model in which judgment and action are merged ($\Delta\chi^2_{(2)}$=64.42; p<.001; RMSEA: 0.13; GFI: 0.85; CFI and IFI: 0.93), and (c) the single-factor model ($\Delta\chi^2_{(3)}$=67.91; p<.001; RMSEA: 0.13; GFI: 0.75; CFI: 0.92; IFI: 0.93). The correlations between the three factors range between 0.53 and 0.67 (p<.001). The correlation between the 16-items measure with the 10-items one is 0.99 (p<.001). Considering this evidence and the parsimony principle, we treat leader-expressed practical wisdom as a core construct built from the three factors/indicators as measured by 10 items (α=0.94).

CFA also tested if leader-expressed practical wisdom (three factors), leader-expressed integrity (five items), and employees' psychological safety (seven items) and speaking up behaviors (six items) represent different constructs. The four-factor model ($\chi^2_{(183)}$ = 372.08; RMSEA: 0.08; GFI: 0.80; CFI and IFI: 0.90) fits the data better than the following models: (a) leader-expressed practical wisdom and leader-expressed integrity merged ($\Delta\chi^2_{(3)}$=63.35, p<.001; RMSEA: 0.10; GFI: 0.78; CFI and IFI: 0.87), (b) psychological safety and speaking up merged ($\Delta\chi^2_{(3)}$=183.67; p<.001; RMSEA: 0.12; GFI: 0.70; CFI: 0.80; IFI: 0.81), and (c) the single-factor model ($\Delta\chi^2_{(6)}$=605.13, p<.001; RMSEA: 0.17; GFI: 0.54; CFI: 0.58; IFI: 0.59). Because all data were collected from the same source, we compared the four-factor model with a five-factor model in which a common latent factor was added to the four-factor model (Podsakoff et al. 2012). While the five-factor model fits the data better ($\Delta\chi^2_{(25)}$=107.95; p<.001; RMSEA: 0.07; GFI: 0.86; CFI: 0.94; IFI: 0.95), the average path coefficient from the common factor to all indicators is 0.28. The square of this value (0.078) suggests that common method bias did not significantly affect the validity of our data, as the calculated variance is only 7.8%.

5.3.3 Testing the unique predictive value of leader-expressed practical wisdom

The correlation between leader-expressed practical wisdom and leader-expressed integrity (r=.77, p<.001; disattenuated r: 0.81; Shaffer et al. 2016), while being high, is below the cutoff value of 0.90 suggested by John and Benet-Martínez (2000) and Shaffer et al. (2016). Leader-expressed practical wisdom correlates positively

[1] E.g., while seven of eight raters considered that the item "the leader is a watchful observer" corresponds to the judgment component, several raters commented that this item is excessively generic and may be interpreted differently by different lay people.

with psychological safety and speaking up behaviors (Table 1). Psychological safety and speaking up behaviors intercorrelate positively.

To test the indirect effect of leader-expressed practical wisdom on employee speaking up behavior through psychological safety, we conducted bias-corrected bootstrap analyses (5000 samples; control variables included). Leader-expressed practical wisdom predicts employees' psychological safety (Table 2; H1 supported), which in turn predicts speaking up behavior (H2 supported). While the direct effect (PROCESS macro; Hayes 2013, model #4) is not significant (B: −0.05, $p = .52$; SE: 0.08; LLCI: −0.22, ULCI: 0.11), the indirect effect is (B: 0.09, SE: 0.05; LLCI: 0.01, ULCI: 0.18; H3 supported). The findings are similar when controls are not included (e.g., indirect effect = B: 0.14, SE: 0.04; LLCI: 0.08, ULCI: 0.22).

5.3.4 Discussion

The findings support the notion that the three components are indicators of the higher-order construct of leader-expressed practical wisdom. The magnitude of the correlation between leader-expressed practical wisdom and leader-expressed integrity, while suggesting that wise leaders are considered more honest, is not enough to accept that the two constructs are empirically identical (Shaffer et al. 2016). First, the correlation is below the cutoff value of 0.90 (John and Benet-Martínez 2000; Shaffer et al. 2016). Second, CFA suggests that the two variables represent different constructs. Third, while leader-expressed practical wisdom predicts unique variance of employees' psychological safety, leader-expressed integrity does not (Table 2). It is also possible that the magnitude of the correlation is affected by common-method bias (Rego et al. 2021; see the overall discussion below). Our findings also suggest that employees who perceive their leader as wise feel psychologically safer and consequently adopt more speaking up behaviors. As psychological safety and speak-

Table 1 Means, standard deviations, and correlations (Study 1)

	Mean	SD	1	2	3	4	5	6	7
1. Employee gender[a]	-	-	-						
2. Employee education[b]	2.70	0.78	−0.08	-					
3. Being vs. not being a supervisor [c]	-	-	0.18*	−0.18*	-				
4. Leader-expressed integrity	3.96	1.23	0.17*	−0.17*	0.11	(0.94)			
5. Leader-expressed practical wisdom	4.03	1.05	0.08	−0.12	−0.01	0.77***	(0.94)		
6. Psychological safety	4.14	0.83	0.21**	−0.21**	0.11	0.43***	0.44***	(0.78)	
7. Speaking up	4.48	0.74	0.19*	−0.09	0.32***	0.25**	0.16*	0.46***	(0.83)

Notes N = 148. [a] 0: female, 1: male; [b] 1: 12 schooling years or less; 2: undergraduate degree; 3: Master's degree; (4) PhD. [c] Being vs. not being a supervisor (1 vs. 0)

Reliabilities in parentheses

*$p < .05$, ** $p < .01$, *** $p < .001$

Table 2 Bootstrap regression analysis to predict speaking up through psychological safety (Study 1)

	Psychological safety						Speaking up					
	B	SE	Bias corrected 95% CI	B	SE	Bias corrected 95% CI	B	SE	Bias corrected 95% CI	B	SE	Bias corrected 95% CI
Employee gender[a]	0.22	0.13	[-0.03, 0.47]	0.24	0.12	[0.99, 0.48]	0.17	0.11	[-0.05, −0.40]	0.08	0.11	[-0.12, 0.29]
Employee education[b]	−0.14	0.09	[-0.32, 0.04]	−0.14	0.09	[-0.32, 0.04]	0.01	0.08	[-0.15, 0.16]	0.06	0.07	[-0.08, 0.20]
Being vs. not being a supervisor [c]	0.04	0.12	[-0.20, 0.27]	0.08	0.12	[-0.16, 0.31]	0.42***	0.12	[0.19, 0.64]	0.39***	0.11	[0.18, 0.60]
Leader-expressed integrity	0.26***	0.06	[0.14, 0.38]	0.10	0.10	[-0.08, 0.30]	0.10	0.07	[-0.03, 0.23]	0.06	0.06	[-0.06, 0.18]
Leader-expressed practical wisdom	-	-	-	0.23*	0.11	[0.02, 0.43]	0.03	0.08	[-0.13, 0.18]	−0.05	0.08	[-0.22, 0.10]
Psychological safety	-	-	-	-	-	-	-	-	-	0.37***	0.08	[0.23, 0.53]
F	10.26***			9.76***			5.51***			9.72***		
R^2	0.22			0.26			0.16			0.29		
ΔR^2	-			0.04			-			0.13		

Direct effect – B: −0.05, p=.52; SE: 0.08; LLCI: −0.22, ULCI: 0.11
Indirect effect – B: 0.09, SE: 0.05; LLCI: 0.01, ULCI: 0.18

Notes N = 148. [a] 0: female, 1: male; [b] 1: 12 schooling years or less; 2: undergraduate degree; 3: Master's degree; (4) PhD. [c] Being vs. not being a supervisor (1 vs. 0)
*p<.05, ** p<.01, *** p<.001

ing up behaviors were measured at a single time, in Study 2 we collected data on those variables at two different times. Moreover, to reinforce the discriminant and predictive validity of leader-expressed practical wisdom, Study 2 includes not only leader-expressed integrity for control, but also leader-expressed humility and leader-expressed balanced information processing.

5.4 Study 2

5.4.1 Sample and procedures

Data were collected in three waves from US employees (from diverse industries) through Qualtrics Panels. At T1, 366 individuals reported leader-expressed practical wisdom, leader-expressed integrity, leader-expressed humility, and leader-expressed balanced processing of information. Two weeks later (T2) those individuals were invited to report their psychological safety. Two weeks later (T3) those who had participated at T2 ($n=211$) reported their own actual speaking up behaviors. One hundred and sixty-four individuals participated in all three waves. After having controlled the quality of the data[2] (DeSimone et al. 2015), 143 usable questionnaires were considered for analysis (M_{age}: 50.80 years, $SD=13.48$; 49.7% female; 31.5% supervisors). No difference was found between the respondents who participated in all three waves vs. those who participated at T1 only, regarding practical wisdom (4.31 vs. 4.21, $p=.53$), integrity (4.38 vs. 4.26, $p=.50$), humility (4.29 vs. 4.23, $p=.77$), and balanced processing (4.15 vs. 4.08, $p=.67$).

5.4.2 Measures

To further explore the equivalence between the 16-items' and the 10-items' measures, the 16 items used in Study 1 measured leader-expressed practical wisdom. While some fit indices of the three-factor model are reasonably acceptable (e.g., CFI and IFI: 0.90; Bentler 1990; Hu and Bentler 1999), others are not (e.g., RMSEA: 0.12; GFI: 0.79). However, the 10-items three-factor model mentioned above (loadings reported in online Appendix A) fits the data well ($\chi^2_{(24)}$: 54.37; RMSEA: 0.07; GFI: 0.93; CFI and IFI: 0.98) and better than the following models: (a) inquiry and judgment merged ($\Delta\chi^2_{(2)}=157.44$; $p<.001$; RMSEA: 0.19; GFI: 0.78; CFI and IFI: 0.86), (b) judgment and action merged ($\Delta\chi^2_{(2)}=53.02$; $p<.001$; RMSEA: 0.23; GFI: 0.86; CFI and IFI: 0.94), and (c) the single-factor model ($\Delta\chi^2_{(3)}=175.89$; $p<.001$; RMSEA: 0.20; GFI: 0.76; CFI and IFI: 0.85). Correlations between the three factors range between 0.54 and 0.73 ($p<.001$). These findings, as well as the parsimony principle (the correlation between the 16-items and 10-items measures is 0.98), support the notion that the three dimensions are indicators of a second-order factor model measured through 10 items ($\alpha=0.94$). Psychological safety ($\alpha=0.80$) and speaking up behaviors ($\alpha=0.78$) were measured with the items used in Study 1.

[2] Screening techniques used: too quick responses, inconsistent responses across similar and dissimilar items, and the same responses to all items.

Employee education, supervisory responsibilities, and leader-expressed integrity (5 items used in Study 1; $\alpha = 0.95$) were included for control. Leader-expressed humility (T1) was also included because humble leaders are more likely to practice the inquiry and judgment components of practical wisdom (Grossmann, Dorfman, et al. 2020a; Steyn and Sewchurran 2021), and to foster employees' psychological safety (Hu et al. 2018). This variable was measured through nine items (Owens et al. 2013; $\alpha = 0.97$; sample item: "The leader actively seeks feedback, even if it is critical"). Leader-expressed balanced processing, a component of authentic leadership, was included because this variable has commonalities mainly with the inquiry component of practical wisdom (Grossmann et al. 2020b) and may affect employees' speaking up behavior through their psychological safety (four items; Neider and Schriesheim 2011; $\alpha = 0.95$; e.g., "My leader objectively analyzes relevant data before making a decision").

5.4.3 Discriminant analysis

CFA tested if practical wisdom (three dimensions), integrity (five items), humility (three factors), balanced processing (four items), psychological safety (seven items), and speaking up (six items) represent different constructs. The six-factor model ($\chi^2_{(335)} = 551.91$; RMSEA: 0.06; GFI: 0.79; CFI and IFI: 0.94) fits the data better than the following models: (a) wisdom and integrity merged ($\Delta\chi^2_{(5)} = 60.21$; $p < .001$; RMSEA: 0.08; GFI: 0.77; CFI and IFI: 0.93), (b) wisdom and humility merged ($\Delta\chi^2_{(5)} = 38.35$; $p < .001$; RMSEA: 0.07; GFI: 0.73; CFI and IFI: 0.93), (c) wisdom and balanced processing merged ($\Delta\chi^2_{(5)} = 31.36$; $p < .001$; RMSEA: 0.07; GFI: 0.78; CFI and IFI: 0.93), (d) integrity, humility, and balanced processing merged ($\Delta\chi^2_{(9)} = 135.91$; $p < .001$; RMSEA: 0.09; GFI: 0.73; CFI and IFI: 0.90), (e) the four leadership variables merged ($\Delta\chi^2_{(12)} = 164.72$; $p < .001$; RMSEA: 0.09; GFI: 0.73; CFI and IFI: 0.90), (f) psychological safety and speaking up merged ($\Delta\chi^2_{(5)} = 268.36$; $p < .001$; RMSEA: 0.10; GFI: 0.69; CFI and IFI: 0.87), and (g) all variables merged ($\Delta\chi^2_{(15)} = 627.90$; $p < .001$; RMSEA: 0.13; GFI: 0.58; CFI: 0.77; IFI: 0.78). Because all data were collected from the same source, we compared the six-factor model with a seven-factor model, in which a common latent factor was added to the six-factor model. While the seven-factor model fits the data better ($\Delta\chi^2_{(34)} = 114.78$; $p < .001$; RMSEA: 0.06; GFI: 0.83; CFI and IFI: 0.96), the average path coefficient from the common factor to all indicators is 0.27. The square of this value (0.076) suggests that common method bias did not significantly affect the validity of our data, as the calculated variance is only 7.6%.

5.4.4 The predictive value of leader-expressed practical wisdom

Leader-expressed practical wisdom correlates strongly with leader-expressed integrity ($r = .83$, $p < .001$; disattenuated r: 0.86; Shaffer et al. 2016), leader-expressed humility ($r = .83$, $p < .001$; disattenuated r: 0.87), and leader-expressed balanced processing ($r = .84$, $p < .001$; disattenuated r: 0.87). While high, those correlations are below the cutoff value of 0.90 (John and Benet-Martínez 2000; Shaffer et al. 2016). As in Study 1, leader-expressed practical wisdom correlates positively with employ-

ees' psychological safety (Table 3). Psychological safety and speaking up intercorrelate positively, the relationship being stronger for Study 1, in which these variables were measured at a single time.

To test the indirect effect of leader-expressed practical wisdom on employee speaking up behavior through psychological safety, we conducted bias-corrected bootstrap analyses (5000 samples). Considering the high correlations between leader-expressed integrity, humility, and balanced processing, and the corresponding multicollinearity problems, these variables were included separately in different analyses. Multicollinearity ceases to be a concern when practical wisdom is included together with each of those three leadership variables (VIFs ≤ 2.96, 3.28, and 3.06 when integrity, humility, and balanced processing are included, respectively). Regardless of the leadership variable considered as control, (a) leader-expressed practical wisdom predicts employees' psychological safety, (b) which in turn predicts their speaking up behavior. While the direct effect is not significant, regardless of the control (integrity: B: −0.06, $p = .48$; SE: 0.08; LLCI: −0.21, ULCI: 0.10; humility: B: 0.02, $p = .85$; SE: 0.08; LLCI: −0.15, ULCI: 0.18; balanced processing: B: 0.02, $p = .77$; SE: 0.08; LLCI: −0.14, ULCI: 0.19), the indirect effect is (B: 0.05, SE: 0.03; LLCI: 0.003, ULCI: 0.11; B: 0.08, SE: 0.03; LLCI: 0.02, ULCI: 0.15; B: 0.09, SE: 0.03; LLCI: 0.03, ULCI: 0.16). When all control variables are included simultaneously (Table 4) leader-expressed practical wisdom predicts employees' psychological safety, which in turn predicts their speaking up behavior, and while the direct effect is not significant (B: 0.01, $p = .89$; SE: 0.09; LLCI: −0.16, ULCI: 0.19), the indirect effect is (B: 0.05, SE: 0.03; LLCI: 0.002, ULCI: 0.12). The findings are similar when controls are not considered (direct effect: B: −0.05, $p = .35$; SE: 0.06; LLCI: −0.17, ULCI: 0.06; indirect effect = B: 0.12, SE: 0.03; LLCI: 0.06, ULCI: 0.19). Thus, the three hypotheses are supported.

5.4.5 Discussion

Study 2 confirms that leader-expressed practical wisdom is a second-order construct integrating the three components we have discussed. The magnitude of the correlations between leader-expressed practical wisdom and (a) leader-expressed integrity, (b) leader-expressed humility, and (c) leader-expressed balanced processing, while being strong (thus suggesting that wise leaders are described as being more honest, humble, and unbiased in processing information from employees) is not enough to suggest that leader-expressed practical wisdom is empirically identical to those three other constructs. First, the correlations are below the cutoff value of 0.90 (John and Benet-Martínez 2000; Shaffer et al. 2016). Second, CFA suggests that the four variables represent different constructs. Third, leader-expressed practical wisdom predicts employees' psychological safety after controlling for the other three constructs, but neither leader-expressed humility nor leader-expressed balanced processing do (Table 4). Moreover, as mentioned for Study 1, the magnitude of the correlations is likely affected by common-method bias (Rego et al. 2021). Findings also confirm that leader-expressed practical wisdom predicts employees' speaking up through their psychological safety. This evidence, found in two markedly different cultures, allows some confidence regarding the unique value of leader-expressed practical wisdom as

Table 3 Means, standard deviations, and correlations (Study 2)

	Mean	SD	1	2	3	4	5	6	7	8	9
1. Employee gender[a]	-	-	-								
2. Employee education[b]	2.03	0.87	0.15	-							
3. Being vs. not being a supervisor [c]	-	-	0.07	0.18*	-						
4. Leader-expressed integrity	4.38	1.43	−0.01	0.24**	0.19*	(0.95)					
5. Leader-expressed humility	4.29	1.46	−0.01	0.28***	0.18*	0.88***	(0.97)				
6. Leader-expressed balanced processing	4.15	1.45	−0.01	0.28***	0.15	0.88***	0.93***	(0.95)			
7. Leader-expressed practical wisdom	4.31	1.31	0.00	0.27***	0.15	0.81***	0.83***	0.82***	(0.94)		
8. Psychological safety	4.36	0.90	0.05	0.14	0.25**	0.62***	0.56***	0.54***	0.58***	(0.80)	
9. Speaking up	4.23	0.75	0.18*	0.18*	0.15	0.14	0.07	0.05	0.12	0.31***	(0.78)

Notes $N=143$. [a] 0: female, 1: male; [b] 1: 12 schooling years or less; 2: undergraduate degree; 3: Master's degree; (4) PhD. [c] Being vs. not being a supervisor (1 vs. 0)

Reliabilities in parentheses

*$p<.05$, ** $p<.01$, *** $p<.001$

Table 4 Bootstrap regression analysis to predict speaking up through psychological safety (Study 2)

	Psychological safety						Speaking up behaviors					
	B	SE	Bias corrected 95% CI	B	SE	Bias corrected 95% CI	B	SE	Bias corrected 95% CI	B	SE	Bias corrected 95% CI
Employee gender[a]	0.10	0.12	[-0.15, 0.33]	0.09	0.12	[-0.15, 0.32]	0.22	0.12	[-0.02, 0.47]	0.20	0.12	[-0.03, 0.43]
Employee education[b]	−0.04	0.08	[-0.19, 0.12]	−0.05	0.08	[-0.20, 0.11]	0.12	0.08	[-0.03, 0.27]	0.14	0.08	[-0.02, 0.29]
Being vs. not being a supervisor [c]	0.26	0.14	[-0.01, 0.54]	0.27*	0.14	[0.01, 0.54]	0.15	0.14	[-0.12, 0.42]	0.08	0.13	[-0.17, 0.33]
Leader-expressed integrity	0.34***	0.09	[0.18, 0.53]	0.29**	0.09	[0.12, 0.48]	0.19*	0.08	[0.02, 0.33]	0.11	0.09	[-0.09, 0.26]
Leader-expressed humility	0.12	0.11	[-0.10, 0.34]	0.06	0.12	[-0.18, 0.28]	−0.04	0.13	[-0.28, 0.24]	−0.06	0.12	[-0.28, 0.21]
Leader-expressed balanced processing	−0.08	0.11	[-0.31, 0.14]	−0.11	0.11	[-0.34, 0.11]	−0.17	0.12	[-0.41, 0.06]	−0.14	0.12	[-0.37, 0.08]
Leader-expressed practical wisdom	-	-	-	0.19*	0.09	[0.01, 0.35]	0.07	0.09	[-0.10, 0.24]	0.01	0.08	[-0.14, 0.18]
Psychological safety	-	-	-	-	-	-	-	-	-	0.28***	0.08	[0.13, 0.45]
F	15.45***			14.34***			2.26*			3.43***		
R^2	0.40			0.43			0.11			0.17		
ΔR^2	-			0.02			-			0.06		
Direct effect – B: 0.01, $p = .89$; SE: 0.09; LLCI: −0.16, ULCI: 0.19 *Indirect effect* - B: 0.05, SE: 0.03; LLCI: 0.002, ULCI: 0.12												

Notes $N = 143$. [a] 0: female, 1: male; [b] 1: 12 schooling years or less; 2: undergraduate degree; 3: Master's degree; (4) PhD. [c] Being vs. not being a supervisor (1 vs. 0)

*$p < .05$, ** $p < .01$, *** $p < .001$

a new construct. However, the correlational nature of the study does not allow establishing causality. We tackle this issue in Study 3.

5.5 Study 3

5.5.1 Sample, procedures, and manipulations

A sample of 167 full-time US employees (200, randomly selected, were invited to participate), from a range of industries was collected through Qualtrics Panel. The condition/vignette ($n=3$) is the unit of analysis; Taylor 2006). Methodological recommendations of at least 20 (Simmons et al. 2011) or 50 observations per condition/cell (Lonati et al. 2018; Simmons et al. 2013) ensures sufficient statistical power. The precaution procedures used in Study 2 to control the quality of the data (DeSimone et al. 2015) led to removing 17 individuals from the analysis. We were thus left with a sample of 150 full-time US employees (53.3% female; M_{age} = 35.8, *SD*: 8.34) for further analysis. To boost the statistical power, a sample of 83 full-time Brazilian employees (47.0% female; M_{age} = 42.22, *SD*: 10.23) was also collected from members of the professional (non-academic) network of one author (from among 240 individuals invited to participate). To prevent demand effects (Lonati et al. 2018), no clue about the objective of the study was disclosed.

Three vignettes (online Appendix B) were created to represent three conditions: low practical wisdom, control, and high practical wisdom. The participants were randomly allocated to one of the scenarios and asked to read their assigned vignette carefully, and then to imagine themselves working with the leader described (John). To manipulate leader-expressed practical wisdom we described the leader through sentences adapted from the three-dimensional measure discussed above. We used transactional leadership, which is neutral in terms of practical wisdom, in the control condition. Similar manipulations have been used in other studies (e.g., Rego et al. 2019). After having found that the results were very similar for both subsamples, the two were merged (country included as a dummy variable in the bias-corrected bootstrap analysis).

5.5.2 Measures

Following the manipulations the participants were asked to report their psychological safety (items used in Study 1; $\alpha=0.74$). We asked participants to imagine how they would feel and behave if they were to work in the team led by John (sample item: "If John were the team leader, it would be safe to take a risk on his team."). Next, respondents were asked to report how likely they would be to adopt speaking up behaviors (items used in Study 1; $\alpha=0.76$) in the team led by John (sample item: "If I were working on the team led by John, I would speak up when workplace events conflicted with my sense of what is appropriate.").

5.5.3 Manipulation check

At the end of the study we asked participants about the extent to which they thought John was wise (7-point Likert scale). As expected, participants ($n=75$) in the high leader-expressed practical wisdom condition reported that John had greater wisdom ($M=5.67$, $SD=1.27$) compared to participants ($n=82$) in the control condition ($M=4.13$, $SD=1.99$; $t_{(155)}=5.71$, $p<.001$) and participants ($n=76$) in the low leader-expressed practical wisdom condition ($M=2.23$, $SD=1.72$; $t_{(149)}=13.73$, $p<.001$). From this we conclude that our manipulation was successful.

5.5.4 Results

Participants in the high leader-expressed practical wisdom condition reported greater psychological safety ($M=4.46$, $SD=0.85$) compared to participants in the control condition[3] ($M=3.49$, $SD=0.95$; $t_{(155)}=6.77$, $p<.001$) and in the low leader-expressed practical wisdom condition ($M=3.07$, $SD=0.74$; $t_{(149)}=10.76$, $p<.001$; H1 supported). In addition, a bias-corrected bootstrap analysis tested if the effect of leader-expressed practical wisdom on employees' speaking up behavior (as reported) is indirect. The findings (Table 5) suggest that leader-expressed practical wisdom predicts employees' psychological safety, which in turn predicts their speaking up behavior. While the direct effect is not significant (B: −0.14, $p=.09$; SE: 0.08; LLCI: −0.30, ULCI: 0.02), the indirect effect is (B: 0.35, SE: 0.06; LLCI: 0.24, ULCI: 0.47). The findings are similar when controls are excluded (direct effect: B: −0.14, $p=.10$; SE: 0.08; LLCI: −0.29, ULCI: 0.02; indirect effect = B: 0.34, SE: 0.06; LLCI: 0.22, ULCI: 0.47). These results support H2 and H3.

5.5.5 Discussion

The findings are consistent with those from Studies 1 and 2 and support the notion that leader-expressed practical wisdom is a predictor of employees' speaking up behavior through their psychological safety. Collecting data about psychological safety and speaking up at a single moment increases the risks of common method bias. This limitation is mitigated by the fact that the relationship between the two variables was also found in Study 2, in which the two variables were collected at different times. Moreover, while Study 3 measured the individuals' *intention* to speak up if they were working for the leader described in the scenario, and literature has shown that there is a discrepancy between *intentions* and *actual* behaviors (Sheeran 2002), the findings of Study 3 are consistent with those from the other two studies, in which participants reported their own actual speaking up behaviors. Overall, by triangulating the findings of Studies 1 and 2, which have modest internal validity (but greater external validity) with those of this experiment, which does have strong internal validity (although more modest external validity) and adopting procedural

[3] Psychological safety of the control condition also differs significantly from psychological safety of the low-wisdom condition ($t_{(156)}=3.07$, $p<.01$).

Table 5 Bootstrap regression analysis to predict speaking up behaviors through psychological safety (Study 3)

	Psychological safety						Speaking up					
	B	SE	Bias corrected 95% CI	B	SE	Bias corrected 95% CI	B	SE	Bias corrected 95% CI	B	SE	Bias corrected 95% CI
Country[a]	0.03	0.17	[-0.31, 0.34]	0.01	0.14	[-0.27, 0.29]	−0.26	0.15	[-0.56, 0.04]	−0.26	0.14	[-0.53, 0.01]
Employee gender[b]	−0.09	0.14	[-0.35, 0.18]	0.04	0.11	[-0.18, 0.27]	0.11	0.12	[-0.13, 0.35]	0.09	0.11	[-0.13, 0.30]
Employee education[c]	−0.01	0.05	[-0.11, 0.10]	−0.02	0.04	[-0.11, 0.06]	0.09	0.05	[-0.01, 0.18]	0.10	0.04	[0.02, 0.18]
Being vs. not being a supervisor[d]	−0.04	0.25	[-0.54, 0.45]	−0.11	0.20	[-0.51, 0.29]	−0.02	0.20	[-0.42, 0.37]	0.03	0.19	[-0.35, 0.41]
Leader-expressed practical wisdom[e]	-	-	-	0.70***	0.07	[0.57, 0.83]	0.21**	0.07	[0.07, 0.34]	−0.14	0.08	[-0.29, 0.01]
Psychological safety	-	-	-	-	-	-	-	-	-	0.49***	0.07	[0.35, 0.64]
F	0.15			19.61***			2.86**			13.31***		
R^2	0.003			0.30			0.06			0.26		
ΔR^2	-			0.30			-			0.20		

Direct effect – B: −0.14, p=.09; SE: 0.08; LLCI: −0.30, ULCI: 0.02
Indirect effect – B: 0.35, SE: 0.06; LLCI: 0.24, ULCI: 0.47

Notes N=233 (N=150: US sample; N=83: Brazil sample). [a] Being vs. not being from US (1 vs. 0); [b] 0: female, 1: male; [c] 1: 12 schooling years or less (no college degree, for the US sample); 2: undergraduate degree (Bachelor's degree); 3: Master's degree; (4) PhD. [d] Being versus not being a supervisor (1 vs. 0). [e] -1, 0, and 1, for low PW condition, control condition, and high PW condition, respectively

*p<.05, ** p<.01, *** p<.001

remedies to reduce the risks of common method bias in Studies 1 and 2, we provide support for our hypothesized model.

6 Overall discussion and conclusions

6.1 Making sense of the main findings

Our work provides empirical support for considering leader-expressed practical wisdom as a higher-order construct built from three interrelated components. Our measure is theoretically and philosophically rooted. It is also parsimonious and empirically more manageable than frameworks including dozens of qualities representing practical wisdom. While the magnitude of the correlations between leader-expressed practical wisdom and the other three leadership constructs is high, it is below the cutoff value of 0.90, even when the disattenuated correlations are considered. Moreover, CFAs suggest that the four variables represent different constructs, and leader-expressed practical wisdom has incremental value for predicting speaking up behavior via psychological safety. One also cannot discount that those correlations may be inflated by the common-method bias. Rego et al. (2021, p. 1159) observed, "While this bias has been considered problematic for studying the predictors–outcomes relationship, the same criticism has not been applied to the relationships among predictors". Therefore, there are reasons to consider leader-expressed practical wisdom as being a different construct that may advance our knowledge about the antecedents of employees' psychological safety and speaking up behavior.

Considering that employees' psychological safety and their speaking up behaviors are important enablers of individual and collective outcomes that matter for organizational competitiveness and sustainability, our research suggests that leaders who express high levels of practical wisdom contribute to such valuable endeavors. The fact that our findings are consistent across different cultures adds cross-cultural validity to our measure and conceptual model. Our findings may help management scholars and practitioners to better understand how practical wisdom can help leaders to make decisions that are both wiser and more effective.

We acknowledge that other models of practical wisdom may be adopted, and future studies may compare the unique predictive power of our measure versus other measures operationalized in different ways. We also acknowledge that not explicitly including a moral component in our measure may be considered problematic by some scholars (Kristjánsson et al. 2021). Critics could even argue that a leader may be rationally "wise" even when inquiring and judging with the aim of pursuing immoral goals. Nevertheless, such a possibility seems implausible because, as mentioned above, practical wisdom as conceptualized and measured here makes pursuing the common good more likely (Sternberg and Karami 2021). Leaders who practice and express the emotionally regulated actions mirrored in our measure are at least much *less likely* to make foolish and unwise decisions.

Let us imagine a leader whose profile mirrors the one representing the content of our measure. Such a leader (see online Appendix A) (a) carefully *considers all the information available* before making an important decision, (b) seeks out informa-

tion *from a variety of sources* so the best decision can be made, (c) conscientiously considers a problem from *all angles to reach the best decision for all parties*, (d) *grasps the complexity* of most situations when making judgments, (e) *correctly interprets complex realities*, (f) *seeks out and understands the pertinent facts* before making a decision, and (g) makes decisions through *considering the concrete realities* that each decision entails. It is difficult to grasp how that leader makes foolish or even immoral decisions such as those associated with the scandals mentioned earlier. If that were the case our research would not have found a significant relationship between a leader's practical wisdom and employees' speaking up behavior via their psychological safety, because leaders' immorality would destroy employees' psychological safety, making them less likely to speak up (Almeida et al. 2022).

The strong correlations between leader-expressed practical wisdom and the two leadership behavioral patterns (integrity and humility) that have significant moral content also suggest that our measure is neither morally neutral nor void. If our measure of practical wisdom were unable to include, at least indirectly and implicitly, any moral dimension, one could not find (as we did) that wise leaders in our research were *also* described as being honest and humble.

One might argue that some wise leaders (as characterized by our measure) whose behaviors foster employees' psychological safety and speaking-up behavior today may tomorrow "kill the messenger of bad news" and retaliate against employees who speak up. But, in such a case, the positive effects investigated in our research (i.e., fostering psychological safety and speaking up behaviors) would last only a short while. After observing that those leaders were merely instrumental/manipulating, unethical, and truly *unwise*, employees would no longer feel psychologically safe and continue to speak up. In that case, the positive relationship between leaders' practical wisdom and speaking up behavior via psychological safety would disappear. This is not what we observe in our data from Study 1 and Study 2 – on the contrary.

Also, the theoretical arguments outlined above (tensions between moral aspirations; complex moral dilemmas) also suggest considering, *directly* or *explicitly*, that the moral component in a measure of leader-expressed practical wisdom faces significant operative and even conceptual difficulties. Such tough challenges and the impracticality of including numerous moral aspirations in a measure of leader-expressed practical wisdom should not lead researchers to avoid measuring (at least a proxy of) leader-expressed practical wisdom. What is needed is that one be aware of the limitations of the proposed measure, be humble enough to accept that this measure is a work in (probably unlimited) progress, and be willing to incorporate further developments and improvements.

6.2 Limitations and future studies

Our research has limitations. First, it is possible that the strong correlations between the three components of leader-expressed practical wisdom (which support the consideration of leader-expressed practical wisdom as a second-order factor built on the three components) are explained by common-source bias. While such a possibility has been considered problematic for studying the predictors-outcomes relationship, the same criticism has rarely been applied to the relationships among predictors (for

an exception, see Rego et al. 2021) or the relationships between the dimensions of multidimensional constructs. We believe that such a path must be explored regarding our measure of leader-expressed practical wisdom in order to more deeply explore if leaders who are more likely to *inquire* are also more likely to *judge* and to *act in* an emotionally regulated way. The study of such a path may benefit from investigating leader-expressed practical wisdom at the team level, with different team members rating different components of such a construct. A related limitation of our measure is that one dimension of leader-expressed practical wisdom is measured through items worded in a negative sense, and another is measured with two items only. Future studies may include some items worded positively for the former dimension and include more items for the latter.

Second, future studies may expand the range of leadership behaviors (both positive, e.g., ethical leadership, inclusive leadership, servant leadership, and negative, e.g., abusive supervision, unethical leadership, and self-serving leadership) to be included in the nomological network of leader-expressed practical wisdom. If data for measuring different leadership constructs are collected from different sources or at different times the findings of such a path of investigation may clarify if leader-expressed practical wisdom is or is not truly different from other leadership constructs. This would be an important endeavor to avoid construct proliferation.

Third, to further explore the validity of our measure, other direct and indirect outcomes of leader-expressed practical wisdom at both the individual (e.g., performance, creativity) and collective (e.g., team learning, team reflexivity, team performance) levels may be included in future studies. For example, are wise leaders less likely to develop overconfidence (Kunz and Sonnenholzner 2023) and hubris (Sadler-Smith and Cojuharenco 2021) and thus less likely to make foolish acquisitions (Hayward and Hambrick 1997)? Future research may also study the impact of leader-expressed practical wisdom on the leader him/herself. It is possible that a wise leader deals more effectively with the multiple demands associated with his/her role and thus experiences better work-family balance and well-being (Rego et al. 2023).

Fourth, future studies may explore if both leader's affective empathy and moral aspirations operate as boundary conditions in the relationship between leader-expressed practical wisdom and employees', team, and organizational outcomes. For example, is a leader who expresses a high level of practical wisdom more effective in leading her/his team if he/she is also empathetic? Leader-expressed practical wisdom may also operate in tandem with paradoxical mindset (Miron-Spektor et al. 2018) to produce virtuous outcomes. It is plausible that responsible leadership (Maak and Pless 2021) requires both practical wisdom and a paradox mindset (Rego et al. 2022). Our measure allows for testing such a hypothesis. Employees' characteristics (e.g., their implicit theories about speaking up) may also operate as boundary conditions.

6.3 Conclusion

Wisdom is a very complicated virtue, its research "is in its infancy" (Kristjánsson et al. 2021, p. 240), and several competing models have been proposed. We contribute to a discussion of the issue by operationalizing leader-expressed practical wisdom as a three-component construct. Our construct must be submitted to further theoretical

and empirical scrutiny aiming to test its validity against other models and approaches. This may increase attention among researchers to the topic. Organizations and even societies may reap economic, social, and moral benefits from selecting wise leaders, or helping leaders to develop and express higher levels of practical wisdom. Steyn and Sewchurran (2021) defended that developing practical wisdom should be an integral part of executive management development aimed at cultivating morally responsible leadership. Developing practical wisdom may also prevent leaders from developing hubris, which is potentially destructive for individuals, organizations, and entire industries (Sadler-Smith and Cojuharenco 2021).

While it is debatable if practical wisdom can or cannot be taught (Aristotle argued that it cannot be taught directly), there are reasons to believe that it can be learned through practice (Steyn and Sewchurran 2021) – i.e., by inquiring into the complex reality involved in each particular decision-making process, judging through obtaining a deep comprehension of that reality, deliberating how to handle it, and acting accordingly.

The three acts of reason involved in practical wisdom, as set out by Aquinas, are as valid today as they were more than seven centuries ago. The need for speed and to appear decisive has been nourished into "one of most dangerous myths of modern organizations" – that "it is better to make a bad decision than no decision" (Bennis et al. 2008, p. 30). If, as Nonaka and Takeuchi (2011, p. 59) have noted, "in an era when discontinuity is the only constant, the ability to lead wisely has nearly vanished", researchers have a moral duty to contribute to the renaissance of the "mother of all virtues".

Appendix A. Items measuring leader-expressed practical wisdom emerging from Confirmatory Factor Analysis

	Completely standardized solution	
	Study 1 ($n=148$)	Study 2 ($n=143$)
Exploring, studying, reflecting (inquiry)		
• My leader does not carefully consider all the information available before making an important decision.[a,b]	0.76	0.97
• … does not seek out information from a variety of sources so the best decision can be made.[a,b]	0.62	0.95
Judging, understanding (judgment)		
• … conscientiously considers a problem from all angles to reach the best decision for all parties. [b]	0.83	0.66
• … grasps the complexity of most situations when making judgments.[b]	0.81	0.89
• … always pays attention to the concrete circumstances under which each decision is made. [c]	0.94	0.86
• … usually seeks out and understands the pertinent facts before making a decision.[c]	0.93	0.90
• … usually correctly interprets complex realities.[a]	0.87	0.90
Choosing, acting (emotionally regulated action)		
• … makes decisions based on the feeling of the moment rather than on careful thought.[a,c]	0.84	0.73

	Completely standardized solution	
• … makes a lot of mistakes because he/she doesn't think before he/she acts.[a,e]	0.85	0.96
• … makes decisions without considering the concrete realities that each decision entails.[a,c]	0.75	0.50

Notes[a] Reverse coded

[b] Adapted from Riggio et al. (2010)

[c] Suggested by the authors

[d] Adapted from Wang and Hackett (2016)

[e] Adapted from Ashton and Lee (2009)

Appendix B. Scenarios

High practical wisdom John is a rational and deep thinker, which allows him to understand the complexity of most situations when making judgments. He takes into account all the pertinent and concrete circumstances when making a decision. Before making an important decision, John seeks information from a variety of sources so the best decision can be made. He also carefully considers all the available information and efficiently and effectively assesses requirements demanded by the situation. And he considers a problem from all angles to reach the best decision for all parties. In short, John makes decisions based on careful analysis and does not allow his impulses to govern his behavior.

Low practical wisdom John often allows his impulses to govern his behavior. He is not much of a rational and deep thinker. From time to time, he even fails to take into account all the pertinent circumstances when making a decision. Additionally, John sometimes does not seek information from many different sources so the best decision can be made. He does not consider all the information available, and sometimes does not assess the requirements demanded by the situation in an efficient and effective way. Usually, he does not make an effort to understand the complexity of situations when making judgments. In short, John sometimes makes decisions without making a careful analysis of the situation.

Control. Whenever you are around John, you know you will be rewarded if you meet your assigned objectives and that you will be punished when you fail to meet work expectations. In John's view, employees may be rewarded or punished according to what they deserve. He always follows through on promises of rewards when his subordinates successfully complete their assignments. John also lets his subordinates know when they meet performance standards and when they do not. When problems become serious, John's subordinates know that John will step in and take whatever corrective action is needed.

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Data availability Data collected for the three studies (four samples), in the SPSS format, are completely available upon request.

Declarations

Conflict of interest The authors declare that they have no conflict of interest.

Ethics approval statement.

The research ethics committee of Universidade Católica Portuguesa approved our study proposal (ec number: ce.227.2019).

Informed consent The authors obtained informed consent from all individual participants included in the study.

Suggested running head Wise leaders fostering employees' speaking up behaviors.

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